

Notice of Allowability

Application No.

10/749,659

Applicant(s)

WANG, ZHONGZE

Examiner

Jennifer M. Kennedy

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed October 5, 2004.
2. ☒ The allowed claim(s) is/are 11,14-16 and 62-66.
3. ☒ The drawings filed on 30 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Mark Matkin on October 18, 2004.

The application has been amended as follows:

In claim 11, line 11, "along only a portion" has been replaced with –along at least a portion--.

In claim 11, line 13, "along at least a portion" has been replaced with –along only a portion--.

In claim 62, line 11, "along only a portion" has been replaced with –along at least a portion--.

In claim 62, line 13, "along at least a portion" has been replaced with –along only a portion--.

The following is an examiner's statement of reasons for allowance: the prior art, either singly or in combination, fails to anticipate or render obvious, the method including the limitations of forming an insulator layer of the silicon-on-insulator circuitry received on the silicon comprising layer, the insulator layer comprising a first silicon dioxide comprising region in contact with the silicon comprising layer and running along

at least a portion of the channel region between the source/drain regions, a silicon nitride comprising region in contact with the first silicon dioxide comprising region and running along only a portion of the channel region, and a second silicon dioxide comprising region in contact with the silicon nitride comprising region, the silicon nitride comprising region being received intermediate the first and second silicon dioxide comprising regions in combination with the other limitations of independent claim 11.

Further, the prior art, either singly or in combination, fails to anticipate or render obvious, the method including the limitations of forming an insulator layer of the silicon-on-insulator circuitry received on the silicon comprising layer, the insulator layer comprising a first silicon dioxide comprising region in contact with the silicon comprising layer and running along at least a portion of the channel region between the source/drain regions, a silicon oxynitride comprising region in contact with the first silicon dioxide comprising region and running along only a portion of the channel region, and a second silicon dioxide comprising region in contact with the silicon oxynitride comprising region, the silicon oxynitride comprising region being received intermediate the first and second silicon dioxide comprising regions in combination with the other limitations of independent claim 62.

The examiner notes that the support for the silicon oxynitride layer can be found on page 7, lines 9-13 of the original specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer M. Kennedy whose telephone number is (571) 272-1672. The examiner can normally be reached on Mon.-Fri. 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Art Unit 2812


jmk